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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/672,776	09/29/00	OND	F 061045

IM22/1206
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WASHINGTON DC 20037-3213

EXAMINER

BROWN, C

ART UNIT	PAPER NUMBER
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1765

DATE MAILED:

12/06/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.
09/672,776

Applicant(s)
Ono

Examiner
Charlotte A. Brown

Group Art Unit
1765



☒ Responsive to communication(s) filed on Sep 29, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 6-9 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 6-9 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

1. Claims 6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 33 of claim 6, "alumina-type" is vague and indefinite.

Claim 8 is indefinite for the use of improper Markush language. The Examiner suggests inserting --the group consisting of--- after "from".

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pyzik et al. (US 5,021,372).

Pyzik discloses a ceramic composition. The composition can be used to polish a surface composed of silicon, alumina, which is a metal film, and nitride, an insulating film. The sample is treated with a series of polishings. The reads on the applicant's limitation of providing a semiconductor substrate that comprises a metal film and an insulating film. The polishing

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composition comprises alumina particles. The alumina particles have a surface area in the range from about $8\text{m}^2/\text{g}$ to about $15\text{m}^2/\text{g}$. Pyzik also discloses that any ratio of conversion to aid densification is acceptable. This reads on the applicant's limitation that the particles have a conversion ratio of from 65 to 90%. The composition comprises a polishing accelerator and water. The polishing accelerator is preferably lanthanum oxide or sodium oxide.

Unlike the claimed invention Pyzik does not disclose a polishing composition in which the surface area of the alumina particles is from 30 to $80\text{m}^2/\text{g}$. It is the Examiner's position that a person having ordinary skill in the art at the time of the claimed invention would have found it obvious to modify Pyzik by using different processing parameters because same were known to be cause effective variables and routine experimentation would have been expected to optimize them.

Changes in temperature, concentration, or other process conditions of an old process does not impart patentability unless the recited ranges are critical, i.e., they produce a new and unexpected result. *In re Aller* et al., 105 USPQ 233.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (US 5,118,645)

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5. Any inquiry concerning this communication from the Examiner should be directed to Charlotte A. Brown whose telephone number is (703) 305-0727.

CAB

December 1, 2000


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SUPERVISORY PATENT EXAMINER
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